

**2003  
General Aviation System Study  
for the  
SCAG Region**

## **Table of Contents**

<u>Chapter 1: Introduction</u>	1
<u>Chapter 2: Analysis Of Existing General Aviation System</u>	6
<u>Chapter 3: Pilots, Non-Pilots And Aircraft Owners</u>	10
<u>Chapter 4: Economic Overview</u>	15
<u>Chapter 5: Aviation Profile By County</u>	25
<i>Imperial County</i>	25
<i>Los Angeles County</i>	32
<i>Orange County</i>	47
<i>Riverside County</i>	50
<i>San Bernardino County</i>	65
<i>Ventura County</i>	82
<u>Chapter 6: Scag 2030 Preferred Aviation Plan Overview</u>	87
<u>Chapter 7: Regional General Aviation Forecasts</u>	93
<i>Imperial County Airports</i>	100
<i>Los Angeles County Airports</i>	101
<i>Orange County Airports</i>	106
<i>Riverside County Airports</i>	107
<i>San Bernardino County Airports</i>	110
<i>Ventura County Airports</i>	115

# **GENERAL AND CORPORATE AVIATION PLAN**

## **CHAPTER 1: Introduction**

### **THE SCAG REGION**

The Southern California Association of Governments (SCAG) is a voluntary organization comprised of representatives of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura counties and cities. The region covers 38,000 square miles, approximately the size of Indiana, making it the largest MPO in the USA. The regional population was 16 million in 2000, just under half of the total California population.

### **THE METROPOLITAN PLANNING PROCESS**

SCAG is responsible to the Federal Aviation Administration and the State of California for planning the regional airport system in accordance with federal and state guidelines. SCAG's Regional Council has recognized that no transportation mode acts in a vacuum separate from other transportation modes. Airport system changes in the past decade have provided the region the opportunity to proactively plan for the growth of regional aviation in conjunction with planning for other modes of transportation.

As the Regional Aviation Plan is implemented for commercial airports, there will be a "ripple effect" through the aviation system, where rising costs, less available capacity and more complex operating environments at Los Angeles International Airport (LAX) and other commercial/large general aviation airports impact the entire metropolitan airport system. To recognize and plan for the potential impacts of the regional aviation plan, SCAG has periodically updated its General Aviation System Plan (GASP).

### **STUDY GOALS**

This Study updates the previous General Aviation Study completed in 1996 as well as the general aviation forecasts developed in 2000 by Communiquest Corporation for SCAG. The main objectives of this study are

- to provide an update to the 1996 General Aviation System Plan to identify trends and forecast the relative health of General Aviation within the region
- to gain a better understanding of corporate aviation within the region and identify potential growth trends
- to estimate potential impacts the Adopted (commercial) Aviation Plan could have on corporate and general aviation activity.

The GASP is produced by SCAG with the assistance of federal and state aviation officials as well as the Aviation Technical Advisory Committee. The GASP conforms to the regional goals, policies and objectives of the SCAG long-range "Regional Transportation Plan." These include:

- **Provide** for regional capture of the economic development opportunities and job growth created by the prospect of significant growth in air traffic in the Region between now and 2025.

- **Reflect** environmental, environmental justice and local quality of life constraints at existing airports that operate in built-out urban environments.
- **Distribute** maximum opportunity to Southern California airports where population and job growth over the next two decades are expected to be strong and where local communities desire the air traffic for economic development reasons.
- **Reflect** that each county should have both the obligation and the opportunity to meet its own air traffic needs where feasible.

**ACTION** Support the expansion of capacity at major existing and potential regional airports to handle anticipated increases in both passenger and cargo volume.

**ACTION** Mitigate the effects of expanding existing airports and consider the reuse of military air bases so that community impacts are minimized.

**ACTION** Maximize air passenger and air cargo utilization of outlying airports in less populated areas.

### **LIMITATIONS TO THIS STUDY**

The most accurate annual operations counts were obtained from airports with control towers as tower personnel record each landing and takeoff. However, many towers do not operate 24 hours/day, nor do they track aircraft operations by type, nor categorize what traffic is itinerate or local in origin. At airports without control towers, it is necessary to rely on professional judgement of airport managers and FAA records.

Much of the data was collected using both 2001 and 2002 data, both of which were affected by the September 11, 2001 terrorist attack and the recent economic downturn.

Several of the forecasts are based on professional judgement, standard formulas or a combination of both.

### **DEFINITION OF GENERAL AVIATION**

General Aviation is considered to be all aviation that is not commercial or military aviation. The majority of aircraft operational activity within the region and throughout the United States is general aviation activity. General aviation activity includes flight instruction, business travel, agricultural, traffic monitoring, police, fire-fighting/emergency services, coast guard, charter, air taxi and personal/recreational flying.

### **GENERAL AVIATION'S ROLE WITHIN THE SCAG REGION**

The SCAG region supports the world's largest and most complex regional aviation systems, composed of 57 public-use airports, several private-use airports and military aviation facilities.

Of the 57 public-use airports within the SCAG region, 44 are considered general aviation. Aviation activity within the Los Angeles area is predominantly general aviation in nature. Much of the general aviation activity within the urban core is business aviation in support of local businesses.

Three of the nation's 10 busiest airports (in terms of general aviation activity) are in the SCAG region. The nation's busiest general aviation airport is Van Nuys airport (with

482,960 operations in 2002). Long Beach (7) and John Wayne (9) have significant general aviation activity, considering both airports also offer commercial service.

Traditionally, general aviation was perceived to be the purview of the upper-middle class, who use their aircraft for recreational purposes. However, the increasing use of corporate aviation at non-hub airports has increased the economic value to local communities. Van Nuys Airport, for example, has an economic impact greater than some commercial airports in the nation.

As the region becomes more urbanized, several general aviation airports are handling greater amounts of corporate aviation activity, particularly business jets. Some, such as Van Nuys and Santa Monica act as relievers to congested Los Angeles International Airport. In the Inland Empire, airports such as Chino are assuming the role of reliever for Ontario International Airport and John Wayne Airport. As these general aviation airports become more active with business aircraft and approach their physical capacity, less efficient aircraft tend to move to nearby airports if practical because of the increased costs and more complex/congested airspace environment. This "ripple effect" can start with the primary hub airport and move throughout the regional aviation system and is discussed in greater detail later in this study.

In the non-urban areas, general aviation aircraft are used for agriculture, flight training, fire/rescue, customs and drug enforcement. Often, these airports relieve larger, congested general aviation airports, particularly in flight training operations.

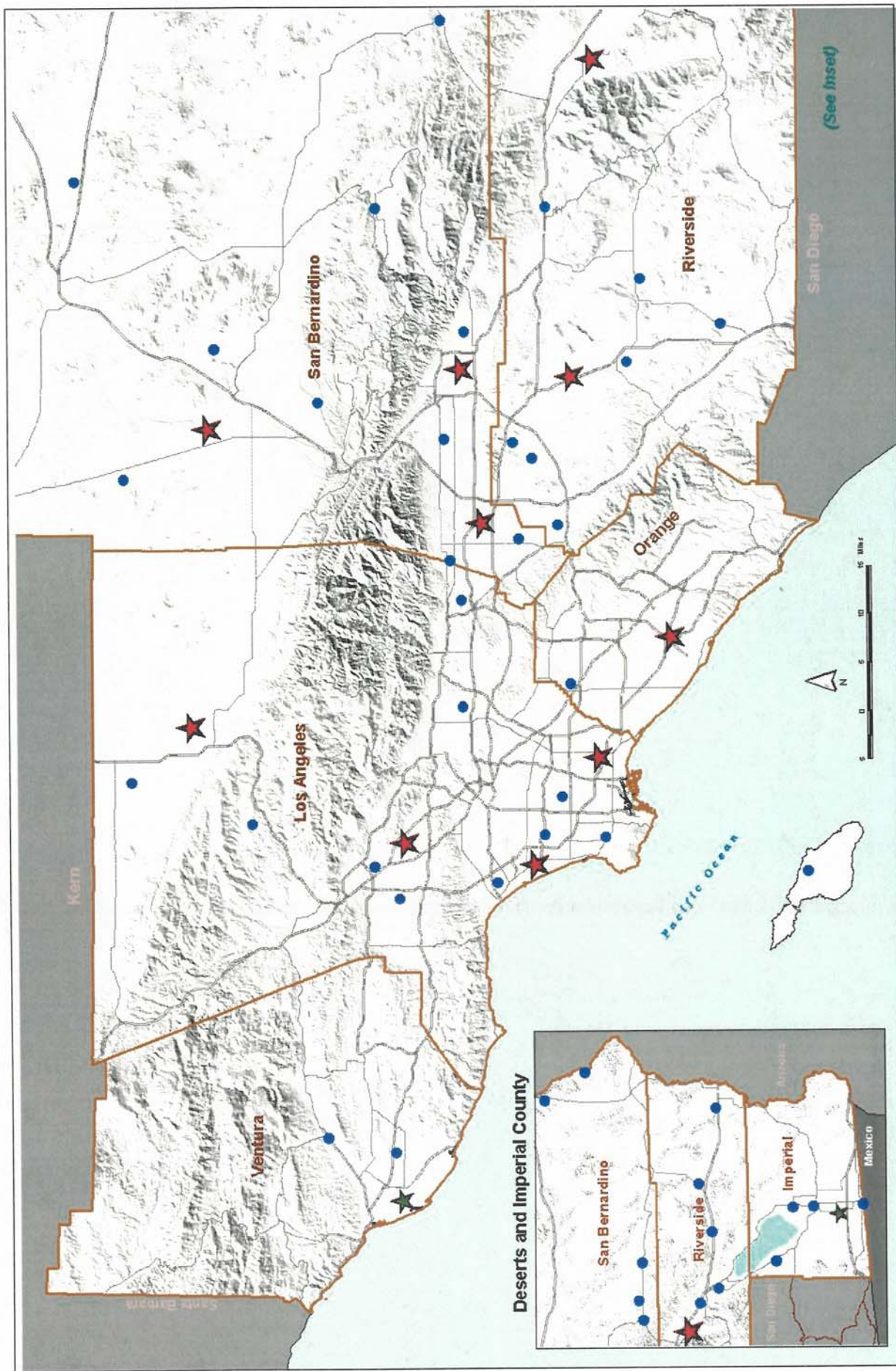
There are nearly 27,000<sup>1</sup> pilots in the SCAG region. These include professional airline pilots, corporate professionals with several thousand of hours of flight experience, private recreational pilots and students just learning to fly. The majority of flight training takes place at general aviation airports.

Over 14,000<sup>2</sup> aircraft are owned by businesses or private owners in the region. The FAA database provides a listing of aircraft by owner address. These aircraft vary in size from one person "experimental" kit-planes to commercial aircraft owned by an aircraft leasing company. Approximately 10,056 aircraft are based at airports within the region.

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<sup>1</sup> Source: Federal Aviation Administration

<sup>2</sup> Source: Federal Aviation Administration



**Figure 1-1**  
**SCAG Regional Airport System**

- ★ Commercial Airport
- ★ Commuter Airport
- General Aviation Airport



## **CORPORATE AVIATION'S ROLE WITHIN THE SCAG REGION**

Corporate aviation, also known as business aviation, provides two functions. The first function is the service of providing business executives and other employees air transportation, through aircraft owned, leased or chartered, thereby excluding scheduled air passenger service. For these aircraft owners, the added benefits of corporate aircraft over commercial aviation outweigh the costs of aircraft ownership, operation and maintenance. The second function is the use of aircraft for services not normally available through other (non-aviation) methods, such as aerial photography, news helicopters, police aircraft, crop dusting, banner towing, etc. For these aircraft owners, the aircraft is not just a means of transportation, but a tool, much like a tractor is to a farmer.

A relatively new factor is "fractional ownership," essentially a time share agreement between corporate aircraft owners. This fractional ownership allows businesses who could not afford business aircraft or who have only a limited need for aircraft to have access to corporate aircraft. According to the National Business Aviation Association, 20% of business aircraft being manufactured are for fractional owners.

Corporate aircraft can range from single engine two passenger aircraft to dedicated business jets to modified passenger jet-aircraft (the Boeing Business Jet is based on the B-737). For the purposes of this study, the emphasis will be on dedicated business jet (turbine) aircraft.

A traditional factor in aviation planning is the location of the airport in relation to the central business district. However, within the SCAG region, there are multiple business districts in the urbanized areas. Within Los Angeles County alone there is downtown Los Angeles, South Bay/Long Beach, Santa Monica/Century City area, Van Nuys/Sherman Oaks, Burbank/Hollywood, Glendale and Pasadena, just to name a few.

Each of the above business districts have one or more nearby commercial or general aviation airports that can handle corporate aviation. In this respect, airports can serve as one of the engines of economic growth. It is important to note that an airport is not normally by itself the sole economic engine. Rather, a successful business airport is part of a comprehensive infrastructure package designed to enhance local business activity. Other parts of the package may include industrial (rather than residential) zoning around (or near) the airport, favorable local taxes, surface transportation infrastructure, nearby universities and training centers, as well as a focus on the types of businesses that are already nearby (industry clusters).